Application No.: 10/520,126 Docket No.: 3691-0114PUS1

Reply to Office Action of January 2, 2007

REMARKS

Claims 1 and 20-32 are pending. No new matter has been added by way of the present

submission. For instance, the amendments made to claim 1 are supported by original claims 1, 5,

11 and 17. New claims 26, 27 and 28 are supported by original claims 5, 17 and 11,

respectively. New claims 29 and 30 are supported by original claims 8 and 14, respectively.

Lastly, new claims 31 and 32 are supported by original claim 17 as well as the originally filed

specification at page 7, lines 4-12 illustratively. A minor typographical error has also been

corrected in claim 25. Accordingly, no new matter has been added.

In view of the following remarks, Applicants respectfully request that the Examiner

withdraw all rejections and allow the currently pending claims.

Clarification of Pending Claims

In the outstanding Office Action, the Examiner has indicated that only claims 1-5, 24 and

25 are pending. This is incorrect since as of the time of issuance of the Office Action, claims 1-

25 are pending. Whether a claim is examined or withdrawn from consideration, it remains

pending and thus Applicants request that the pending claims be acknowledged as such.

Election/Restriction

The Examiner has maintained the outstanding Restriction Requirement and asserted a

Final status. Applicants respectfully request reconsideration since the present claims share unity

of invention.

For instance, the Examiner has asserted that the modified protein as claimed for instance

in claim 1, lacks a special technical feature as defined by PCT Rule 13.2. Applicants disagree.

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The Examiner's assertion is that the special technical feature does not define a contribution over

the prior art. However, Applicants point out that a prior art rejection is conspicuously absent

from the Examiner's rejection. Each of the specific substitutions recited in the present claims are

shared by a water-soluble glucose dehydrogenase having pyrroloquinoline quinone (POOGDH)

as a coenzyme. Thus, the specific mutants are certainly related by function (mutant PQQGDH

having high selectivity for glucose compared with the wild type water-soluble glucose

dehydrogenase) and share common structure in that they differ only by certain substitutions.

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This provide a basis for unity of invention and thus, the presently pending claims deserve full

consideration on the merits.

Objections to the Claims

The Examiner has objected to claims 1-5, 24 and 25 as containing non-elected subject

matter. Applicants disagree and refer the Examiner to the state of the presently pending claims as

well as the discussion of unity of invention above. This objection is thus traversed.

Issues under 35 U.S.C. § 112, second paragraph

The Examiner has rejected claims 2-5 under 35 U.S.C. § 112, second paragraph for the

reasons recited at pages 3-4 of the outstanding Office Action. Applicants respectfully traverse

this rejection. Although claims 2-5 are cancelled, some of the subject matter recited therein (for

instance, claim 5) is present in other claims currently presented herein. Therefore, to this extent,

Applicants provide the following discussion.

The Examiner has asserted that the particular recite amino acid position numbers which

do not match up with amino acid numbers in SEQ ID NO: 1. Applicants have amended the

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claims in order to reflect the specific nature of the amino acid numbering of the present

invention. As described in the present specification, the amino acid number recited in the

original claims (and specification) starts at the first Met residue. In this regard the Examiner is

requested to reference the originally filed specification at page 3, which recites:

The amino acid numbering in this specification starts from the initiator methionine as the +1 position.

In contrast, the amino acid numbering used in SEQ ID NO:1 necessarily starts from the

N-terminus of the protein. The whole amino acid sequence of the enzyme is known in the art

(see Mol. Gen. Genet. (1989), 217:430-436, referenced at page 2 of the originally filed

specification). Those of skill in the art readily understand this numbering system. Accordingly,

the present claims are fully definite.

The Examiner is therefore requested to withdraw this rejection.

Issues under 35 U.S.C. § 112, first paragraph

The Examiner has rejected claims 1-3, 24 and 25 under 35 U.S.C. § 112, first paragraph

for the reasons recited at pages 5-8 of the outstanding Office Action. Applicants respectfully

traverse this rejection.

Applicants respectfully submit that the presently pending claims, which require specific

substitutions at specific locations fully satisfy the requirements of 35 U.S.C. §112, first

paragraph. The Examiner is therefore respectfully requested to withdrawn this rejection.

In view of the above, Applicants respectfully submit that the present claims are in

condition for allowance. Therefore, the Examiner is requested to withdraw all rejections and

allow the currently pending claims.

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If the Examiner has any questions or comments, please contact Craig A. McRobbie, Registration No 42,874 at the offices of Birch, Stewart, Kolasch & Birch, LLP.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to our Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

Dated: June 1, 2007 Respectfully submitted,

Gerald M. Murphy, Jr. Registration No.: 28,977

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